ENVIRONMENTAL RESOLUTIONS, INC.

July 18, 2005

Mr. Jose Quevedo
Los Angeles County Department of Public Works
900 South Fremont Avenue
Alhambra, California 91803

Subject: **Quarterly Report for the Second Quarter 2005**
Former Mobil Station 18F2Q
12616 Imperial Highway
Norwalk, California
LACDPW File No. I-346

Mr. Quevedo:

At the request of ExxonMobil Oil Corporation (ExxonMobil), Environmental Resolutions, Inc. is submitting the Second Quarter 2005 ExxonMobil Quarterly Report for the above-referenced site. The format utilized for the report consolidates groundwater sampling (where applicable), Title 23, Subchapter 16 reporting and consultant progress updates for ExxonMobil into one summary report.

Please call me at (949) 457-7999 if you have any questions.

Sincerely,
Environmental Resolutions, Inc.

Patrick J. Toelkes
Project Manager
P.G. 7155

cc: Mr. Gregory K. Barton, ExxonMobil

20372 North Sea Circle, Lake Forest, California 92630-8806 949-457-8950 (FAX 457-8956)
Lake Forest • Novato • Seattle

3316
EXNQTRLY
Date: July 18, 2005

EXXONMOBIL QUARTERLY REPORT

Site Status: Former Mobil Station

RAS Location #: 18F2Q Address:	12616 Imperial Highway, Norwalk, CA
ExxonMobil Environmental Engineer:	Mr. Gregory K. Barton
Consulting Co./Contact Person:	ERI/Mr. Patrick J. Toelkes
Primary Agency/ID Number:	Mr. Jose Quevedo
	Los Angeles County Department of Public Works
	900 South Fremont Avenue, Alhambra, CA 91803-1331
	File #I-346

WORK PERFORMED THIS QUARTER [Second - 2005]:

- 04/01/05 – ERI replaces Holguin, Fahan & Associates, Inc. as the environmental consultant for this site.
- 06/21/05 – Conducted quarterly purge groundwater monitoring and sampling for five wells. Properly recycled purge water at Crosby & Overton of Long Beach, California, under a non-hazardous waste manifest. Manifest will be included with the third quarter 2005 quarterly report.
- 07/15/05 – Received from the CRWQCB verbal extension for submission of quarterly report to 07/22/05.

WORK PROPOSED FOR NEXT QUARTER [Third – 2005]:

- Submit a quarterly report.
- Conduct quarterly purge groundwater monitoring and sampling.

Current Phase of Project:	Monitoring and sampling
Frequency of Monitoring and Sampling:	Quarterly
Liquid Phase Hydrocarbons Present on Site:	None
Cumulative LPH Recovered to Date:	None
Water Wells or Surface Waters within a 1000' Radius & Their Respective Directions:	None
Current Remediation Techniques:	None
Permits for Discharge:	None
Depth to Groundwater:	99 to 100 feet bgs – measured on 06/21/05

Please call Mr. Patrick J. Toelkes at (949) 457-7999 for any questions regarding this report.

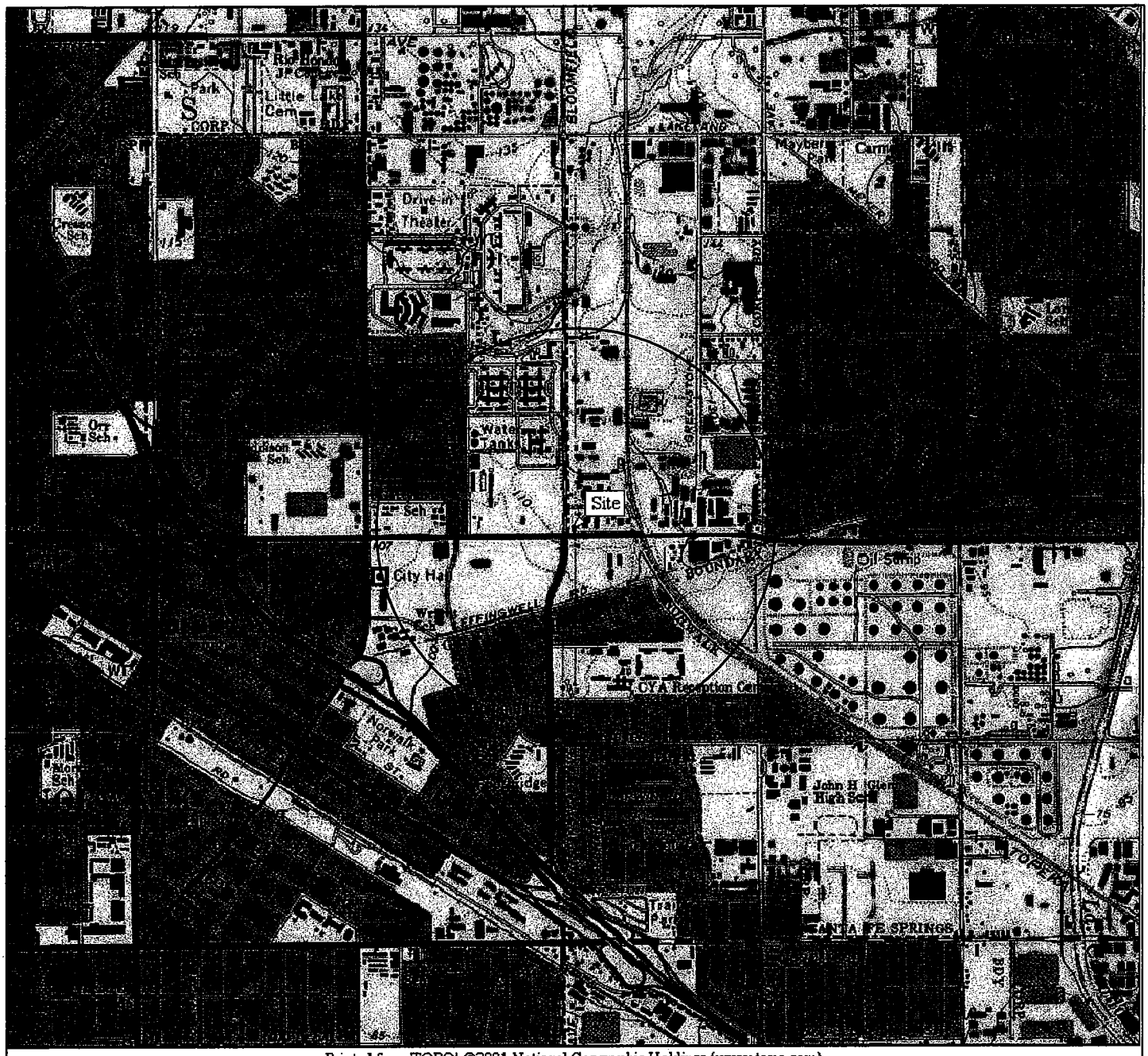
Sincerely,
Environmental Resolutions, Inc.

Patrick J. Toelkes
P.G. 7155

PROFESSIONAL GEOLOGIST • PATRICK J. TOELKES P.G. 7155 Exp 07/06 • STATE OF CALIFORNIA

ATTACHED:

- Site Location Map (Plate 1)
- Groundwater Elevation Contour Map – 06/21/05 (Plate 2)
- Benzene Groundwater Isopleth Concentration Map – 06/21/05 (Plate 3)
- MTBE Groundwater Isopleth Concentration Map – 06/21/05 (Plate 4)
- Cumulative Water Level Measurements and Groundwater Analyses (Table 1)
- Laboratory Report and Chain-of-Custody Record
- Purging and Sampling Records
- Purging and Sampling Protocol



Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)

FN 3316TOPO

Map Name: Whittier, CA
Version: 1981

EXPLANATION

1/2-mile radius circle

N

APPROXIMATE SCALE

0 — 0.5 — 1 mile

SOURCE:
Modified from a map
provided by
National Geographic's TOPO!

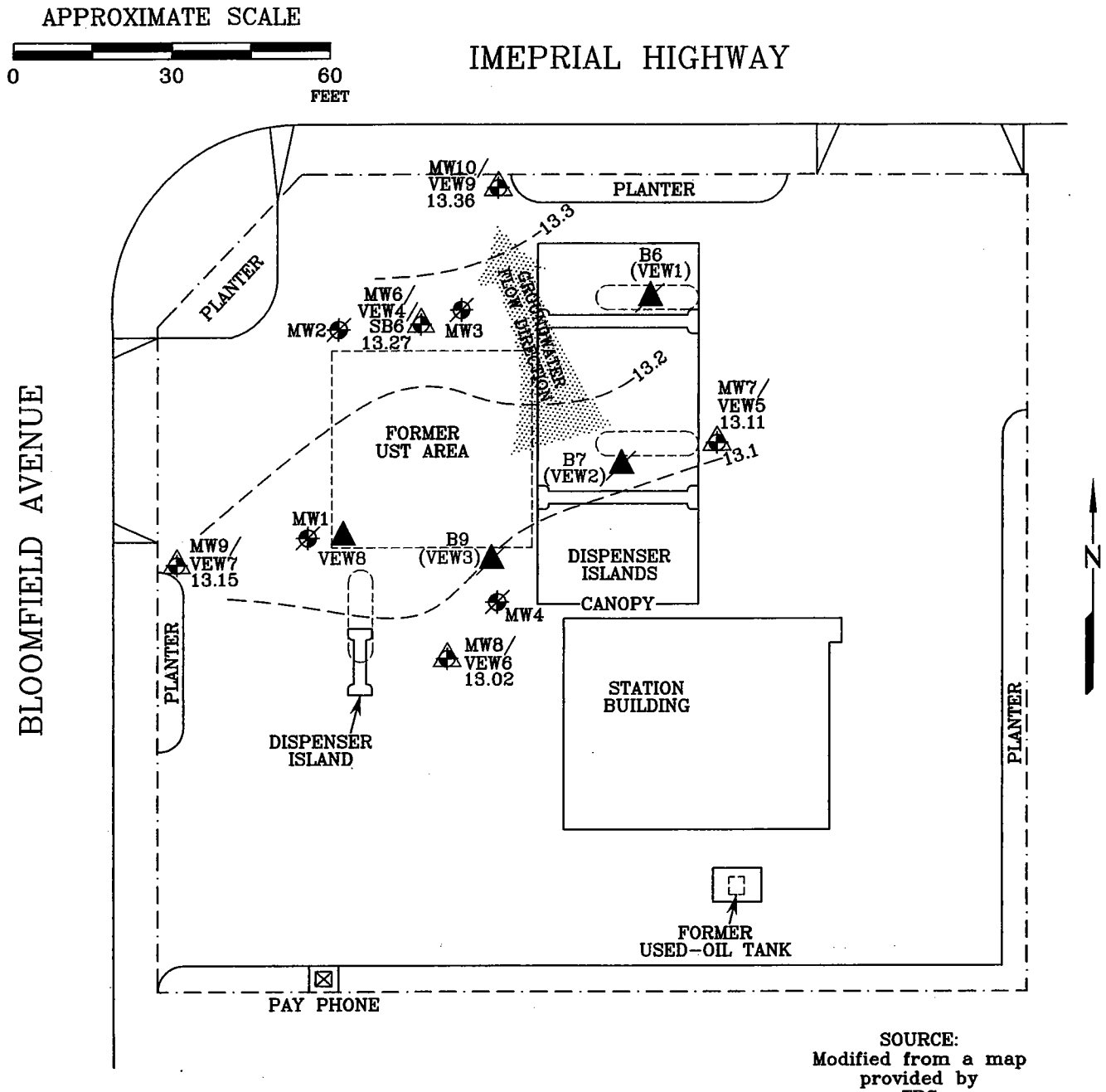
ERI ENVIRONMENTAL RESOLUTIONS, INC

SITE LOCATION MAP

MOBIL STATION 18F2Q
12616 Imperial Highway
Norwalk, California

PROJECT NO. 3316

PLATE 1



SOURCE:
Modified from a map
provided by
TRC

FN 33160002

EXPLANATION

- MW10/VEW9 — Groundwater monitoring/vapor extraction well
- VEW8 — Soil vapor extraction well
- MW4 — Destroyed groundwater monitoring well
- VEW2 — Destroyed soil vapor extraction well
- Former dispenser island
- 13.36 — Groundwater elevation (feet, relative to mean sea level)
- Line of equal groundwater elevation

ERI ENVIRONMENTAL RESOLUTIONS, INC.

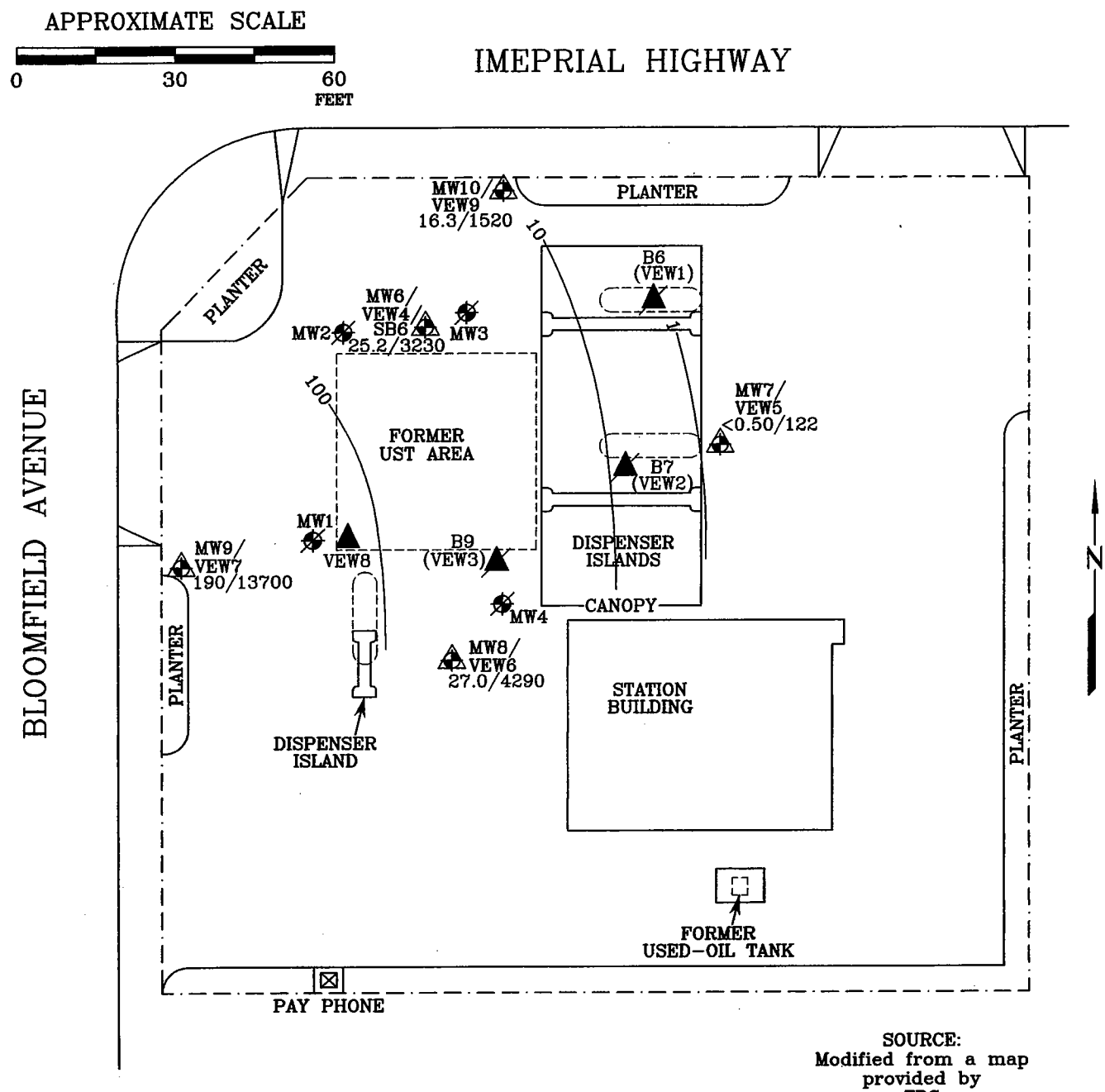
GROUNDWATER ELEVATION CONTOUR MAP - 06/21/05

MOBIL STATION 18F2Q
12616 Imperial Highway
Norwalk, California

PROJECT NO.
3316

PLATE
2

DATE: 07/18/05



FN 33160002

EXPLANATION

MW10/ VEW9	Groundwater monitoring/vapor extraction well	190/13700	Benzene/TPHg concentration in ug/l
VEW8	Soil vapor extraction well	<0.50	Less than the stated laboratory reporting limit
MW4	Destroyed groundwater monitoring well	ug/l	Micrograms per liter
VEW2	Destroyed soil vapor extraction well	———	Line of equal benzene concentration
	Former dispenser island		

ENVIRONMENTAL RESOLUTIONS, INC.

BENZENE GROUNDWATER ISOPLETH CONCENTRATION MAP - 06/21/05

MOBIL STATION 18F2Q
12616 Imperial Highway
Norwalk, California

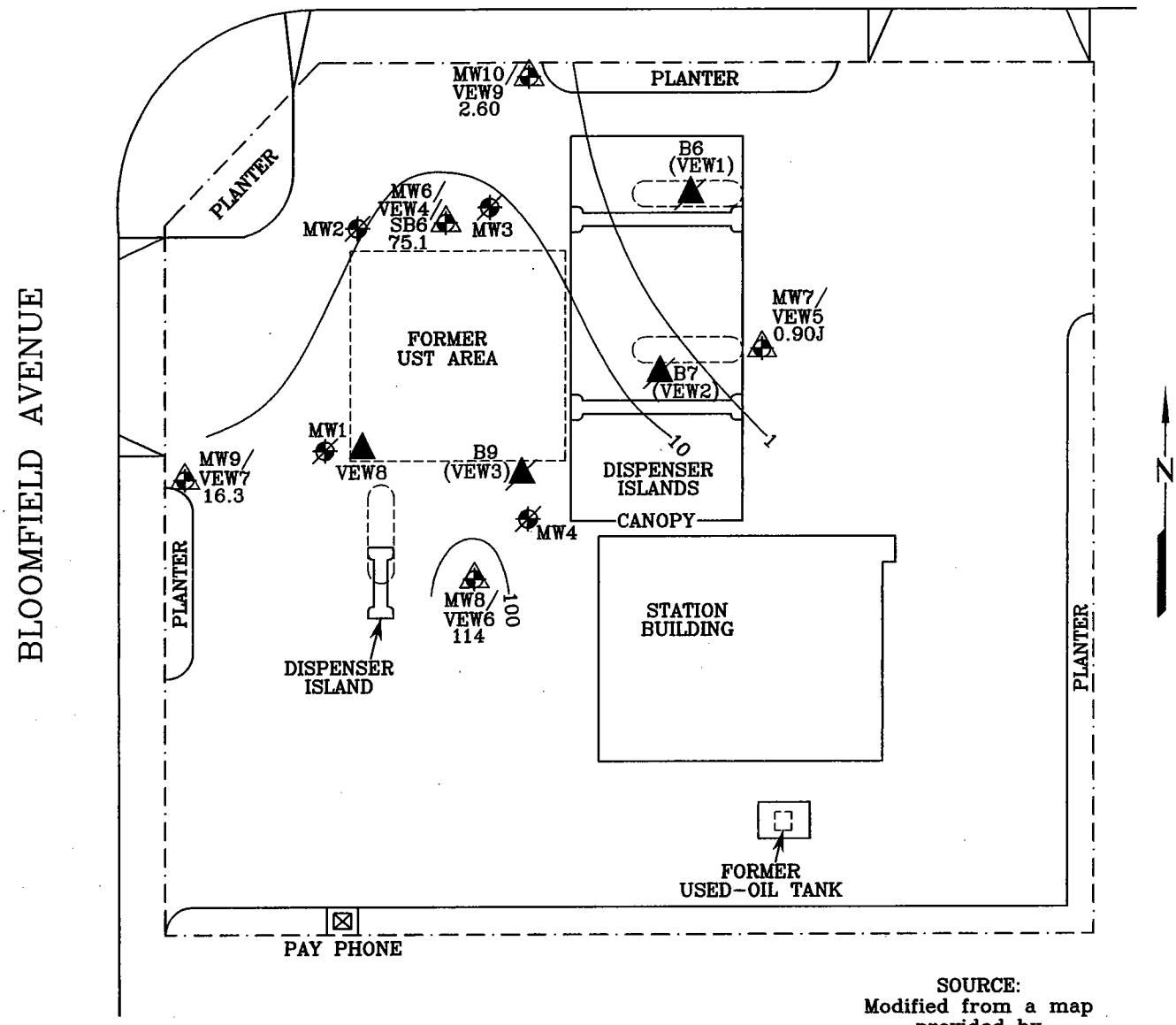
PROJECT NO. 3316

PLATE 3

DATE: 07/18/05

APPROXIMATE SCALE

0 30 60
FEET



SOURCE:
Modified from a map
provided by
TRC

FN 33160002

EXPLANATION

MW10/ VEW9	Groundwater monitoring/vapor extraction well
VEW8	Soil vapor extraction well
MW4	Destroyed groundwater monitoring well
VEW2	Destroyed soil vapor extraction well
	Former dispenser island
114	MTBE concentration in ug/l
J	Estimated value between method detection limit and practical quantitation limit
ug/l	Micrograms per liter
———	Line of equal MTBE concentration

ERI ENVIRONMENTAL RESOLUTIONS, INC.

MTBE GROUNDWATER ISOPLETH CONCENTRATION MAP - 06/21/05

MOBIL STATION 18F2Q
12616 Imperial Highway
Norwalk, California

PROJECT NO. 3316

PLATE 4

DATE: 07/18/06

TABLE 1

CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

MOBIL STATION 18F2Q

12616 IMPERIAL HIGHWAY

NORWALK, CALIFORNIA

ERI 3316

Date	Well Elev	GW Depth	GW Elev	LPH	Benzene (ug/l)	Toluene (ug/l)	Ethyl-benzene (ug/l)	Xylenes (ug/l)	TPHg (ug/l)	MTBE (ug/l)	DIPE (ug/l)	ETBE (ug/l)	TAME (ug/l)	TBA (ug/l)
Field Point	**MW6**	***Well Screen Interval (feet):***												
02/18/05	112.98	99.90	13.08	no	26.8	2.00	13.8	700	2550	23.8	<1.00	<1.00	<1.00	<10.0
06/21/2005	112.98	99.71	13.27	no	25.2	27.0	134	1100	3230	75.1	<1.00	<1.00	<1.00	45.5
Field Point	**MW7**	***Well Screen Interval (feet):***												
02/18/05	113.22	100.32	12.90	no	<1.00	<1.00	<1.00	<1.00	<50.0	<2.00	<1.00	<1.00	<1.00	<10.0
06/21/2005	113.22	100.11	13.11	no	<0.50	<0.50	<0.50	<0.50	122	0.90 J	<1.00	<1.00	<1.00	<10.0
Field Point	**MW8**	***Well Screen Interval (feet):***												
02/18/05	112.63	99.72	12.91	no	48.0	1.20	<1.00	327	1290	4.60	<1.00	<1.00	<1.00	<10.0
06/21/2005	112.63	99.61	13.02	no	27.0	48.9	92.7	1690	4290	114	<1.00	<1.00	<1.00	6.20 J
Field Point	**MW9**	***Well Screen Interval (feet):***												
02/18/05	112.02	98.99	13.03	no	109	252	630	7800	21900	<2.00	<1.00	<1.00	<1.00	<10.0
06/21/2005	112.02	98.87	13.15	no	190	222	1080	9300	13700	16.3	<1.00	<1.00	<1.00	<10.0
Field Point	**MW10**	***Well Screen Interval (feet):***												
02/24/05	112.52	99.46	13.06	no	30.0	<1.00	12.4	559	1900	4.60	<1.00	<1.00	<1.00	<10.0
06/21/2005	112.52	99.16	13.36	no	16.3	0.70	33.6	364	1520	2.60	<1.00	<1.00	<1.00	<10.0

TABLE 1

CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

MOBIL STATION 18F2Q

12616 IMPERIAL HIGHWAY

NORWALK, CALIFORNIA

ERI 3316

Explanation:
ELEV = elevation
EPA = Environmental Protection Agency
GW = groundwater
DIPE = di-isopropyl ether
ETBE = ethyl tertiary butyl ether
TAME = tertiary amyl methyl ether
TBA = tertiary butyl alcohol
TPHg = total petroleum hydrocarbons as gasoline
MTBE = methyl tertiary butyl ether
MTBE analyzed by EPA Method 8260B.
LPH = liquid phase hydrocarbons (thickness measured in feet)
Data prior to second quarter 2005 taken from previous consultant's groundwater table.
<50.0 = not detected at or above stated laboratory reporting limit
ug/l = micrograms per liter

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

PG

7/ 6/05

ENVIRONMENTAL RESOLUTIONS, INC 10224
Pat Toelkes
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project identified below:

Project Name: EXXONMOBIL 18-F2Q
Project Number: ERI 3316 13.
Laboratory Project Number: 420849.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. Any QC recoveries outside laboratory control limits are flagged individually with an #. Sample specific comments and quality control statements are included in the Laboratory notes section of the analytical report for each sample report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

Sample Identification	Lab Number	Collection Date
W-99-MW6	05-A92091	6/21/05
W-100-MW7	05-A92092	6/21/05
W-99-MW8	05-A92093	6/21/05
W-98-MW9	05-A92094	6/21/05
W-99-MW10	05-A92095	6/21/05
TRIP BLANKS	05-A92096	6/21/05

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

Sample Identification	Lab Number	Collection Date

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: Pamela A. Langford Report Date: 7/ 5/05

Johnny A. Mitchell, Laboratory Director
Michael H. Dunn, M.S., Technical Director
Pamela A. Langford, Senior Project Manager
Eric S. Smith, QA/QC Director
Sandra McMillin, Technical Services
Gail A. Lage, Senior Project Manager
Glenn L. Norton, Technical Services
Kelly S. Comstock, Technical Services
Roxanne L. Connor, Senior Project Manag

Laboratory Certification Number: 01168CA

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10224
Pat Toelkes
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A92091
Sample ID: W-99-MW6
Sample Type: Water
Site ID: 18-F2Q

Date Collected: 6/21/05
Time Collected: 9:40
Date Received: 6/24/05
Time Received: 8:05

Project: ERI 3316 13
Project Name: EXXONMOBIL 18-F2Q
Sampler: JORGE GONZALEZ

Purchase Order: 4505904641

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.00		ug/l	1.00	0.27	1.	6/27/05	18:40	8260B	A. Steimle	8874
**tert-amyl methyl ether	<1.00		ug/L	1.00	0.30	1.	6/27/05	18:40	8260B	A. Steimle	8874
**Tertiary butyl alcohol	45.5		ug/l	10.0	4.28	1.0	6/27/05	18:40	8260B	A. Steimle	8874
**Benzene	25.2		ug/l	0.50	0.25	1.0	6/27/05	18:40	8260B	A. Steimle	8874
**Ethylbenzene	134.		ug/l	2.50	0.95	5.0	6/28/05	20:32	8260B	S. Edwards	3907
**Toluene	27.0		ug/l	0.50	0.17	1.0	6/27/05	18:40	8260B	A. Steimle	8874
**Xylenes (Total)	1100		ug/l	5.00	3.30	10.0	6/27/05	19:04	8260B	A. Steimle	8879
**Methyl-t-butyl ether	75.1		ug/l	1.00	0.23	1.0	6/27/05	18:40	8260B	A. Steimle	8874
**Diisopropyl ether	<1.00		ug/l	1.00	0.18	1.	6/27/05	18:40	8260/SA05-77	A. Steimle	8874
**TPH-GC											
**TPH (Gasoline Range)	3230		ug/l	50.0	33.0	1.0	6/28/05	20:20	CA-LUFT	Chakrabort	9649

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-TFT	132.	63. - 134.
VOA Surr 1,2-DCA-d4	97.	70. - 130.
VOA Surr Toluene-d8	103.	78. - 121.
VOA Surr, 4-BFB	97.	78. - 126.
VOA Surr, DBFM	90.	79. - 122.

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

ANALYTICAL REPORT

Laboratory Number: 05-A92091
Sample ID: W-99-MW6

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10224
Pat Toelkes
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A92092
Sample ID: W-100-MW7
Sample Type: Water
Site ID: 18-F2Q

Date Collected: 6/21/05
Time Collected: 9:56
Date Received: 6/24/05
Time Received: 8:05

Project: ERI 3316 13
Project Name: EXXONMOBIL 18-F2Q
Sampler: JORGE GONZALEZ

Purchase Order: 4505904641

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.00		ug/l	1.00	0.27	1.	6/27/05	17:51	8260B	A. Steimle	8874
**tert-amyl methyl ether	<1.00		ug/L	1.00	0.30	1.	6/27/05	17:51	8260B	A. Steimle	8874
**Tertiary butyl alcohol	<10.0		ug/l	10.0	4.28	1.	6/27/05	17:51	8260B	A. Steimle	8874
**Benzene	<0.50		ug/l	0.50	0.25	1.	6/27/05	17:51	8260B	A. Steimle	8874
**Ethylbenzene	<0.50		ug/l	0.50	0.19	1.	6/27/05	17:51	8260B	A. Steimle	8874
**Toluene	<0.50		ug/l	0.50	0.17	1.	6/27/05	17:51	8260B	A. Steimle	8874
**Xylenes (Total)	<0.50		ug/l	0.50	0.33	1.	6/27/05	17:51	8260B	A. Steimle	8874
**Methyl-t-butyl ether	0.90	J	ug/l	1.00	0.23	1.0	6/27/05	17:51	8260B	A. Steimle	8874
**Diisopropyl ether	<1.00		ug/l	1.00	0.18	1.	6/27/05	17:51	8260/SA05-77	A. Steimle	8874
**TPH-GC											
**TPH (Gasoline Range)	122.		ug/l	50.0	33.0	1.0	6/29/05	12:28	CA-LUFT	Chakrabort	9655

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-TFT	128.	63. - 134.
VOA Surr 1,2-DCA-d4	98.	70. - 130.
VOA Surr Toluene-d8	103.	78. - 121.
VOA Surr, 4-BFB	93.	78. - 126.
VOA Surr, DBFM	91.	79. - 122.

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

ANALYTICAL REPORT

Laboratory Number: 05-A92092
Sample ID: W-100-MW7

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10224
Pat Toelkes
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A92093
Sample ID: W-99-MW8
Sample Type: Water
Site ID: 18-F2Q

Date Collected: 6/21/05
Time Collected: 10:22
Date Received: 6/24/05
Time Received: 8:05

Project: ERI 3316 13
Project Name: EXXONMOBIL 18-F2Q
Sampler: JORGE GONZALEZ

Purchase Order: 4505904641

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.00		ug/l	1.00	0.27	1.	6/28/05	17:34	8260B	S. Edwards	3907
**tert-amyl methyl ether	<1.00		ug/L	1.00	0.30	1.	6/28/05	17:34	8260B	S. Edwards	3907
**Tertiary butyl alcohol	6.20	J	ug/l	10.0	4.28	1.0	6/28/05	17:34	8260B	S. Edwards	3907
**Benzene	27.0		ug/l	0.50	0.25	1.0	6/28/05	17:34	8260B	S. Edwards	3907
**Ethylbenzene	92.7		ug/l	0.50	0.19	1.0	6/28/05	17:34	8260B	S. Edwards	3907
**Toluene	48.9		ug/l	0.50	0.17	1.0	6/28/05	17:34	8260B	S. Edwards	3907
**Xylenes (Total)	1690		ug/l	5.00	3.30	10.0	6/28/05	17:58	8260B	S. Edwards	3909
**Methyl-t-butyl ether	114.		ug/l	1.00	0.23	1.0	6/28/05	17:34	8260B	S. Edwards	3907
**Diisopropyl ether	<1.00		ug/l	1.00	0.18	1.	6/28/05	17:34	8260/SA05-77	S. Edwards	3907
**TPH-GC											
**TPH (Gasoline Range)	4290		ug/l	500.	330.	10.0	6/29/05	12:43	CA-LUFT	Chakrabort	9655

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-TFT	96.	63. - 134.
VOA Surr 1,2-DCA-d4	101.	70. - 130.
VOA Surr Toluene-d8	102.	78. - 121.
VOA Surr, 4-BFB	93.	78. - 126.
VOA Surr, DBFM	90.	79. - 122.

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

ANALYTICAL REPORT

Laboratory Number: 05-A92093
Sample ID: W-99-MW8

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10224
Pat Toelkes
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A92094
Sample ID: W-98-MW9
Sample Type: Water
Site ID: 18-F2Q

Date Collected: 6/21/05
Time Collected: 10:45
Date Received: 6/24/05
Time Received: 8:05

Project: ERI 3316 13
Project Name: EXXONMOBIL 18-F2Q
Sampler: JORGE GONZALEZ

Purchase Order: 4505904641

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.00		ug/l	1.00	0.27	1.	6/28/05	19:14	8260B	S. Edwards	3907
**tert-amyl methyl ether	<1.00		ug/L	1.00	0.30	1.	6/28/05	19:14	8260B	S. Edwards	3907
**Tertiary butyl alcohol	<10.0		ug/l	10.0	4.28	1.	6/28/05	19:14	8260B	S. Edwards	3907
**Benzene	190.		ug/l	0.50	0.25	1.0	6/28/05	19:14	8260B	S. Edwards	3907
**Ethylbenzene	1080		ug/l	5.00	1.90	10.0	6/28/05	19:41	8260B	S. Edwards	3909
**Toluene	222.		ug/l	5.00	1.70	10.0	6/28/05	19:41	8260B	S. Edwards	3909
**Xylenes (Total)	9300		ug/l	50.0	33.0	100.	6/28/05	20:08	8260B	S. Edwards	3914
**Methyl-t-butyl ether	16.3		ug/l	1.00	0.23	1.0	6/28/05	19:14	8260B	S. Edwards	3907
**Diisopropyl ether	<1.00		ug/l	1.00	0.18	1.	6/28/05	19:14	8260/SA05-77	S. Edwards	3907
**TPH-GC											
**TPH (Gasoline Range)	13700		ug/l	2500	1650	50.0	6/29/05	12:58	CA-LUFT	Chakrabort	9655

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-TFT	131.	63. - 134.
VOA Surr 1,2-DCA-d4	102.	70. - 130.
VOA Surr Toluene-d8	104.	78. - 121.
VOA Surr, 4-BFB	97.	78. - 126.
VOA Surr, DBFM	92.	79. - 122.

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

ANALYTICAL REPORT

Laboratory Number: 05-A92094
Sample ID: W-98-MW9

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10224
Pat Toelkes
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A92095
Sample ID: W-99-MW10
Sample Type: Water
Site ID: 18-F2Q

Date Collected: 6/21/05
Time Collected: 11:10
Date Received: 6/24/05
Time Received: 8:05

Project: ERI 3316 13
Project Name: EXXONMOBIL 18-F2Q
Sampler: JORGE GONZALEZ

Purchase Order: 4505904641

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.00		ug/l	1.00	0.27	1.	6/28/05	18:22	8260B	S. Edwards	3907
**tert-amyl methyl ether	<1.00		ug/L	1.00	0.30	1.	6/28/05	18:22	8260B	S. Edwards	3907
**Tertiary butyl alcohol	<10.0		ug/l	10.0	4.28	1.	6/28/05	18:22	8260B	S. Edwards	3907
**Benzene	16.3		ug/l	0.50	0.25	1.0	6/28/05	18:22	8260B	S. Edwards	3907
**Ethylbenzene	33.6		ug/l	0.50	0.19	1.0	6/28/05	18:22	8260B	S. Edwards	3907
**Toluene	0.70		ug/l	0.50	0.17	1.0	6/28/05	18:22	8260B	S. Edwards	3907
**Xylenes (Total)	364.		ug/l	0.50	0.33	1.0	6/28/05	18:22	8260B	S. Edwards	3907
**Methyl-t-butyl ether	2.60		ug/l	1.00	0.23	1.0	6/28/05	18:22	8260B	S. Edwards	3907
**Diisopropyl ether	<1.00		ug/l	1.00	0.18	1.	6/28/05	18:22	8260/SA05-77	S. Edwards	3907
**TPH-GC											
**TPH (Gasoline Range)	1520		ug/l	50.0	33.0	1.0	6/28/05	21:19	CA-LUFT	Chakrabort	9649

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-TFT	128.	63. - 134.
VOA Surr 1,2-DCA-d4	98.	70. - 130.
VOA Surr Toluene-d8	103.	78. - 121.
VOA Surr, 4-BFB	92.	78. - 126.
VOA Surr, DBFM	91.	79. - 122.

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

ANALYTICAL REPORT

Laboratory Number: 05-A92095
Sample ID: W-99-MW10

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.
U = Analyte analyzed for but not detected.
# = Recovery outside Laboratory historical or method prescribed limits.
J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.
B = Analyte was detected in the method blank.
E = Estimated Value above the calibration limit of the instrument.

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10224
Pat Toelkes
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A92096
Sample ID: TRIP BLANKS
Sample Type: Water
Site ID: 18-F2Q

Date Collected: 6/21/05
Time Collected:
Date Received: 6/24/05
Time Received: 8:05

Project: ERI 3316 13
Project Name: EXXONMOBIL 18-F2Q
Sampler: JORGE GONZALEZ

Purchase Order: 4505904641

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.00		ug/l	1.00	0.27	1.	6/25/05	21:34	8260B	S. Edwards	7736
**tert-amyl methyl ether	<1.00		ug/L	1.00	0.30	1.	6/25/05	21:34	8260B	S. Edwards	7736
**Tertiary butyl alcohol	7.40	J	ug/l	10.0	4.28	1.0	6/25/05	21:34	8260B	S. Edwards	7736
**Benzene	<0.50		ug/l	0.50	0.25	1.	6/25/05	21:34	8260B	S. Edwards	7736
**Ethylbenzene	<0.50		ug/l	0.50	0.19	1.	6/25/05	21:34	8260B	S. Edwards	7736
**Toluene	<0.50		ug/l	0.50	0.17	1.	6/25/05	21:34	8260B	S. Edwards	7736
**Xylenes (Total)	<0.50		ug/l	0.50	0.33	1.	6/25/05	21:34	8260B	S. Edwards	7736
**Methyl-t-butyl ether	<1.00		ug/l	1.00	0.23	1.	6/25/05	21:34	8260B	S. Edwards	7736
**Diisopropyl ether	<1.00		ug/l	1.00	0.18	1.	6/25/05	21:34	8260/SA05-77	S. Edwards	7736
**TPH-GC											
**TPH (Gasoline Range)	<50.0		ug/l	50.0	33.0	1.	6/28/05	21:34	CA-LUFT	Chakrabort	9649

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-TFT	96.	63. - 134.
VOA Surr 1,2-DCA-d4	100.	70. - 130.
VOA Surr Toluene-d8	94.	78. - 121.
VOA Surr, 4-BFB	93.	78. - 126.
VOA Surr, DBFM	98.	79. - 122.

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

ANALYTICAL REPORT

Laboratory Number: 05-A92096
Sample ID: TRIP BLANKS

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

PROJECT QUALITY CONTROL DATA
Project Number: ERI 3316 13
Page: 1

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
UST ANALYSIS								
TPH (Gasoline Range)	mg/l	48.6	97.8	50.0	98	43. - 150.	9649	05-A91032
TPH (Gasoline Range)	mg/l	48.6	101.	50.0	105	43. - 150.	9649	M:05A91032
BTEX/GRO Surr., a,a,a-TFT	% Recovery				134	63. - 134.	9649	
BTEX/GRO Surr., a,a,a-TFT	% Recovery				102	63. - 134.	9649	

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
VOA PARAMETERS								
Benzene	mg/l	< 0.00050	0.0604	0.0500	121	62. - 143.	7736	92252
Benzene	mg/l	< 0.00050	0.0612	0.0500	122	62. - 143.	7736	M:92252
Benzene	mg/l	< 0.00025	0.0412	0.0500	82	62. - 143.	8874	BLANK
Benzene	mg/l	< 0.00025	0.0424	0.0500	85	62. - 143.	8874	M:BLANK
Benzene	mg/l	< 0.00050	0.0461	0.0500	92	62. - 143.	3907	92904
Benzene	mg/l	< 0.00050	0.0479	0.0500	96	62. - 143.	3907	M:92904
Toluene	mg/l	< 0.00050	0.0566	0.0500	113	63. - 141.	7736	92252
Toluene	mg/l	< 0.00050	0.0583	0.0500	117	63. - 141.	7736	M:92252
Toluene	mg/l	< 0.00017	0.0480	0.0500	96	63. - 141.	8874	BLANK
Toluene	mg/l	< 0.00017	0.0495	0.0500	99	63. - 141.	8874	M:BLANK
Toluene	mg/l	< 0.00050	0.0535	0.0500	107	63. - 141.	3907	92904
Toluene	mg/l	< 0.00050	0.0565	0.0500	113	63. - 141.	3907	M:92904
VOA Surr 1,2-DCA-d4	% Rec				100	70. - 130.	7736	
VOA Surr 1,2-DCA-d4	% Rec				98	70. - 130.	7736	
VOA Surr 1,2-DCA-d4	% Rec				101	70. - 130.	8874	
VOA Surr 1,2-DCA-d4	% Rec				98	70. - 130.	8874	
VOA Surr 1,2-DCA-d4	% Rec				103	70. - 130.	3907	
VOA Surr 1,2-DCA-d4	% Rec				103	70. - 130.	3907	
VOA Surr Toluene-d8	% Rec				92	78. - 121.	7736	
VOA Surr Toluene-d8	% Rec				91	78. - 121.	7736	
VOA Surr Toluene-d8	% Rec				106	78. - 121.	8874	

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

PROJECT QUALITY CONTROL DATA
Project Number: ERI 3316 13
Page: 2

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
VOA Surr Toluene-d8	% Rec				105	78. - 121.	8874	
VOA Surr Toluene-d8	% Rec				102	78. - 121.	3907	
VOA Surr Toluene-d8	% Rec				101	78. - 121.	3907	
VOA Surr, 4-BFB	% Rec				94	78. - 126.	7736	
VOA Surr, 4-BFB	% Rec				94	78. - 126.	7736	
VOA Surr, 4-BFB	% Rec				96	78. - 126.	8874	
VOA Surr, 4-BFB	% Rec				95	78. - 126.	8874	
VOA Surr, 4-BFB	% Rec				95	78. - 126.	3907	
VOA Surr, 4-BFB	% Rec				95	78. - 126.	3907	
VOA Surr, DBFM	% Rec				98	79. - 122.	7736	
VOA Surr, DBFM	% Rec				98	79. - 122.	7736	
VOA Surr, DBFM	% Rec				94	79. - 122.	8874	
VOA Surr, DBFM	% Rec				94	79. - 122.	8874	
VOA Surr, DBFM	% Rec				95	79. - 122.	3907	
VOA Surr, DBFM	% Rec				93	79. - 122.	3907	

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
UST PARAMETERS						
TPH (Gasoline Range)	mg/l	97.8	101.	3.22	27.	9649
BTEX/GRO Surr., a,a,a-TFT	% Recovery		102.			9649

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
VOA PARAMETERS						
Benzene	mg/l	0.0604	0.0612	1.32	27.	7736
Benzene	mg/l	0.0412	0.0424	2.87	27.	8874
Benzene	mg/l	0.0461	0.0479	3.83	27.	3907

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

PROJECT QUALITY CONTROL DATA
Project Number: ERI 3316 13
Page: 3

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Toluene	mg/l	0.0566	0.0583	2.96	34.	7736
Toluene	mg/l	0.0480	0.0495	3.08	34.	8874
Toluene	mg/l	0.0535	0.0565	5.45	34.	3907
VOA Surr 1,2-DCA-d4	% Rec		98.			7736
VOA Surr 1,2-DCA-d4	% Rec		98.			8874
VOA Surr 1,2-DCA-d4	% Rec		103.			3907
VOA Surr Toluene-d8	% Rec		91.			7736
VOA Surr Toluene-d8	% Rec		105.			8874
VOA Surr Toluene-d8	% Rec		101.			3907
VOA Surr, 4-BFB	% Rec		94.			7736
VOA Surr, 4-BFB	% Rec		95.			8874
VOA Surr, 4-BFB	% Rec		95.			3907
VOA Surr, DBFM	% Rec		98.			7736
VOA Surr, DBFM	% Rec		94.			8874
VOA Surr, DBFM	% Rec		93.			3907

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
UST PARAMETERS						
TPH (Gasoline Range)	mg/l	1.00	1.01	101	64 - 130	9649
TPH (Gasoline Range)	mg/l	1.00	1.15	115	64 - 130	9649
TPH (Gasoline Range)	mg/l	1.00	1.05	105	64 - 130	9655
TPH (Gasoline Range)	mg/l	1.00	1.17	117	64 - 130	9655
BTEX/GRO Surr., a,a,a-TFT	% Recovery			128	63 - 134	9649
BTEX/GRO Surr., a,a,a-TFT	% Recovery			98	63 - 134	9649
BTEX/GRO Surr., a,a,a-TFT	% Recovery			131	63 - 134	9655
BTEX/GRO Surr., a,a,a-TFT	% Recovery			97	63 - 134	9655

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

PROJECT QUALITY CONTROL DATA
Project Number: ERI 3316 13
Page: 4

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
VOA PARAMETERS						
Ethyl-t-butylether	mg/l	0.0500	0.0580	116	67 - 140	7736
Ethyl-t-butylether	mg/l	0.0500	0.0508	102	67 - 140	8874
Ethyl-t-butylether	mg/l	0.0500	0.0481	96	67 - 140	3907
tert-amyl methyl ether	mg/L	0.0500	0.0623	125	68 - 134	7736
tert-amyl methyl ether	mg/L	0.0500	0.0546	109	68 - 134	8874
tert-amyl methyl ether	mg/L	0.0500	0.0518	104	68 - 134	3907
Tertiary butyl alcohol	mg/l	0.500	0.692	138	28 - 182	7736
Tertiary butyl alcohol	mg/l	0.500	0.494	99	28 - 182	8874
Tertiary butyl alcohol	mg/l	0.500	0.553	111	28 - 182	3907
Benzene	mg/l	0.0500	0.0528	106	78 - 123	7736
Benzene	mg/l	0.0500	0.0489	98	78 - 123	8874
Benzene	mg/l	0.0500	0.0458	92	78 - 123	3907
Ethylbenzene	mg/l	0.0500	0.0545	109	80 - 124	7736
Ethylbenzene	mg/l	0.0500	0.0624	125 #	80 - 124	8874
Ethylbenzene	mg/l	0.0500	0.0564	113	80 - 124	3907
Ethylbenzene	mg/l	0.0500	0.0564	113	80 - 124	3909
Toluene	mg/l	0.0500	0.0523	105	77 - 124	7736
Toluene	mg/l	0.0500	0.0585	117	77 - 124	8874
Toluene	mg/l	0.0500	0.0540	108	77 - 124	3907
Toluene	mg/l	0.0500	0.0540	108	77 - 124	3909
Xylenes (Total)	mg/l	0.150	0.157	105	81 - 124	7736
Xylenes (Total)	mg/l	0.150	0.179	119	81 - 124	8874
Xylenes (Total)	mg/l	0.150	0.179	119	81 - 124	8879
Xylenes (Total)	mg/l	0.150	0.165	110	81 - 124	3907
Xylenes (Total)	mg/l	0.150	0.165	110	81 - 124	3909
Xylenes (Total)	mg/l	0.150	0.165	110	81 - 124	3914
Methyl-t-butyl ether	mg/l	0.0500	0.0614	123	69 - 136	7736
Methyl-t-butyl ether	mg/l	0.0500	0.0525	105	69 - 136	8874
Methyl-t-butyl ether	mg/l	0.0500	0.0522	104	69 - 136	3907
Diisopropyl ether	mg/l	0.0500	0.0516	103	65 - 140	7736
Diisopropyl ether	mg/l	0.0500	0.0464	93	65 - 140	8874
Diisopropyl ether	mg/l	0.0500	0.0434	87	65 - 140	3907

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

PROJECT QUALITY CONTROL DATA
Project Number: ERI 3316 13
Page: 5

VOA Surr 1,2-DCA-d4	% Rec	96	70 - 130	7736
VOA Surr 1,2-DCA-d4	% Rec	95	70 - 130	8874
VOA Surr 1,2-DCA-d4	% Rec	100	70 - 130	3907
VOA Surr 1,2-DCA-d4	% Rec	100	70 - 130	3909
VOA Surr 1,2-DCA-d4	% Rec	100	70 - 130	3914
VOA Surr Toluene-d8	% Rec	92	78 - 121	7736
VOA Surr Toluene-d8	% Rec	104	78 - 121	8874
VOA Surr Toluene-d8	% Rec	104	78 - 121	3907
VOA Surr Toluene-d8	% Rec	104	78 - 121	3909
VOA Surr Toluene-d8	% Rec	104	78 - 121	3914
VOA Surr, 4-BFB	% Rec	93	78 - 126	7736
VOA Surr, 4-BFB	% Rec	94	78 - 126	8874
VOA Surr, 4-BFB	% Rec	98	78 - 126	3907
VOA Surr, 4-BFB	% Rec	98	78 - 126	3909
VOA Surr, 4-BFB	% Rec	98	78 - 126	3914
VOA Surr, DBFM	% Rec	92	79 - 122	7736
VOA Surr, DBFM	% Rec	91	79 - 122	8874
VOA Surr, DBFM	% Rec	95	79 - 122	3907
VOA Surr, DBFM	% Rec	95	79 - 122	3909
VOA Surr, DBFM	% Rec	95	79 - 122	3914

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
UST PARAMETERS					
TPH (Gasoline Range)	< 0.0500	mg/l	9649	6/28/05	17:07
TPH (Gasoline Range)	< 0.0500	mg/l	9649	6/28/05	17:22
TPH (Gasoline Range)	< 0.0500	mg/l	9655	6/29/05	7:36
TPH (Gasoline Range)	< 0.0500	mg/l	9655	6/29/05	7:51

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
UST PARAMETERS					
BTEX/GRO Surr., a,a,a-TFT	97.	% Recovery	9649	6/28/05	17:07
BTEX/GRO Surr., a,a,a-TFT	129.	% Recovery	9649	6/28/05	17:22

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

PROJECT QUALITY CONTROL DATA
Project Number: ERI 3316 13
Page: 6

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
BTEX/GRO Surr., a,a,a-TFT	129.	% Recovery	9655	6/29/05	7:36
BTEX/GRO Surr., a,a,a-TFT	94.	% Recovery	9655	6/29/05	7:51

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
VOA PARAMETERS					
Ethyl-t-butylether	< 0.00027	mg/l	7736	6/25/05	21:09
Ethyl-t-butylether	< 0.00027	mg/l	8874	6/27/05	12:32
Ethyl-t-butylether	< 0.00027	mg/l	3907	6/28/05	14:40
tert-amyl methyl ether	< 0.00030	mg/L	7736	6/25/05	21:09
tert-amyl methyl ether	< 0.00030	mg/L	8874	6/27/05	12:32
tert-amyl methyl ether	< 0.00030	mg/L	3907	6/28/05	14:40
Tertiary butyl alcohol	< 0.00428	mg/l	7736	6/25/05	21:09
Tertiary butyl alcohol	< 0.00428	mg/l	8874	6/27/05	12:32
Tertiary butyl alcohol	< 0.00428	mg/l	3907	6/28/05	14:40
Benzene	< 0.00025	mg/l	7736	6/25/05	21:09
Benzene	< 0.00025	mg/l	8874	6/27/05	12:32
Benzene	< 0.00025	mg/l	3907	6/28/05	14:40
Ethylbenzene	< 0.00019	mg/l	7736	6/25/05	21:09
Ethylbenzene	< 0.00019	mg/l	8874	6/27/05	12:32
Ethylbenzene	< 0.00019	mg/l	3907	6/28/05	14:40
Ethylbenzene	< 0.00019	mg/l	3909	6/28/05	14:40
Toluene	< 0.00017	mg/l	7736	6/25/05	21:09
Toluene	< 0.00017	mg/l	8874	6/27/05	12:32
Toluene	< 0.00017	mg/l	3907	6/28/05	14:40
Toluene	< 0.00017	mg/l	3909	6/28/05	14:40
Xylenes (Total)	< 0.00033	mg/l	7736	6/25/05	21:09
Xylenes (Total)	< 0.00033	mg/l	8874	6/27/05	12:32
Xylenes (Total)	< 0.00033	mg/l	8879	6/27/05	12:32
Xylenes (Total)	< 0.00033	mg/l	3907	6/28/05	14:40
Xylenes (Total)	< 0.00033	mg/l	3909	6/28/05	14:40
Xylenes (Total)	< 0.00033	mg/l	3914	6/28/05	14:40

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

PROJECT QUALITY CONTROL DATA
Project Number: ERI 3316 13
Page: 7

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Methyl-t-butyl ether	< 0.00023	mg/l	7736	6/25/05	21:09
Methyl-t-butyl ether	< 0.00023	mg/l	8874	6/27/05	12:32
Methyl-t-butyl ether	< 0.00023	mg/l	3907	6/28/05	14:40
Diisopropyl ether	< 0.00018	mg/l	7736	6/25/05	21:09
Diisopropyl ether	< 0.00018	mg/l	8874	6/27/05	12:32
Diisopropyl ether	< 0.00018	mg/l	3907	6/28/05	14:40
VOA Surr 1,2-DCA-d4	100.	% Rec	7736	6/25/05	21:09
VOA Surr 1,2-DCA-d4	99.	% Rec	8874	6/27/05	12:32
VOA Surr 1,2-DCA-d4	99.	% Rec	3907	6/28/05	14:40
VOA Surr 1,2-DCA-d4	99.	% Rec	3909	6/28/05	14:40
VOA Surr 1,2-DCA-d4	99.	% Rec	3914	6/28/05	14:40
VOA Surr Toluene-d8	95.	% Rec	7736	6/25/05	21:09
VOA Surr Toluene-d8	101.	% Rec	8874	6/27/05	12:32
VOA Surr Toluene-d8	104.	% Rec	3907	6/28/05	14:40
VOA Surr Toluene-d8	104.	% Rec	3909	6/28/05	14:40
VOA Surr Toluene-d8	104.	% Rec	3914	6/28/05	14:40
VOA Surr, 4-BFB	95.	% Rec	7736	6/25/05	21:09
VOA Surr, 4-BFB	95.	% Rec	8874	6/27/05	12:32
VOA Surr, 4-BFB	95.	% Rec	3907	6/28/05	14:40
VOA Surr, 4-BFB	95.	% Rec	3909	6/28/05	14:40
VOA Surr, 4-BFB	95.	% Rec	3914	6/28/05	14:40
VOA Surr, DBFM	98.	% Rec	7736	6/25/05	21:09
VOA Surr, DBFM	90.	% Rec	8874	6/27/05	12:32
VOA Surr, DBFM	92.	% Rec	3907	6/28/05	14:40
VOA Surr, DBFM	92.	% Rec	3909	6/28/05	14:40
VOA Surr, DBFM	92.	% Rec	3914	6/28/05	14:40

= Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 420849

TestAmerica
ANALYTICAL TESTING CORPORATION

Nashville Division

COOLER RECEIPT FORM BC#

Client Name : ERI

Cooler Received/Opened On: 6/24/05 Accessioned By: James D. Jacobs

Log-in Personnel Signature

1. Temperature of Cooler when triaged: 1 **Degrees Celsius**
2. Were custody seals on outside of cooler?..... YES....NO....NA
   a. If yes, how many and where: 1 Front
3. Were custody seals on containers?..... NO...YES...NA
4. Were the seals intact, signed, and dated correctly?..... YES....NO...NA
5. Were custody papers inside cooler?..... YES....NO...NA
6. Were custody papers properly filled out (ink, signed, etc)?..... YES....NO...NA
7. Did you sign the custody papers in the appropriate place?..... YES....NO...NA
8. What kind of packing material used? Bubblewrap Peanuts Vermiculite Foam Insert Ziplock baggies Paper Other None
9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None
10. Did all containers arrive in good condition (unbroken)?..... YES...NO...NA
11. Were all container labels complete (#, date, signed, pres., etc)?..... YES...NO...NA
12. Did all container labels and tags agree with custody papers?..... YES...NO...NA
13. Were correct containers used for the analysis requested?..... YES...NO...NA
14. a. Were VOA vials received?..... YES...NO...NA
    b. Was there any observable head space present in any VOA vial?..... NO...YES...NA
15. Was sufficient amount of sample sent in each container?..... YES...NO...NA
16. Were correct preservatives used?..... YES...NO...NA
    If not, record standard ID of preservative used here_____
17. Was residual chlorine present?..... NO...YES...NA
18. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below:

    3645

    Fed-Ex UPS Velocity DHL Route Off-street Misc.
19. If a Non-Conformance exists, see attached or comments below:

BIS = Broken in shipment

TestAmerica INCORPORATED

Nashville Division
2960 Foster Creighton
Nashville, TN 37204

Phone: 615-726-0177
Toll Free: 800-[illegible]0980
Fax: 615-726-3404

420849

ExxonMobil

Consultant Name: Environmental Resolutions, Inc.
Address: 20372 North Sea Circle
City/State/Zip: Lake Forest, CA 92630
ExxonMobil Territory Mgr: GREG BARTON
Consultant Project Mgr: PAT TOELKES
Consultant Telephone Number: 949-457-8950 Fax No.: 949-457-8956
Sampler Name: (Print) Jorge Gonzalez
Sampler Signature:

TA Account #: 10224 1 of 1
Invoice To: GREG BARTON
Report To: PAT TOELKES
PO #: 2005
Facility ID #: ERI 3316 13 / EXXONMOBIL 18F2Q
Site Address: 12616 IMPERIAL HIGHWAY
City, State, Zip: NORWALK, CA
Regulatory District (CA): LARWQCB

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass (Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	Analyze For: 8015M DIESEL-CAL LUFT	TPH/GAS-CAL LUFT	FULL SCAN 8260B +OXYGENATES / GC/MS	METHANOL -CAL LUFT	ETHANOL (8260)	*8260B/BTEX +OXYGENATES / GC/MS	*BTEX/MTBE BY 8021	8010	REDOX POTENTIAL	NITRATE/SULFATE	METHANE(8015)	RUSH TAT (Pre-Schedule)	5 Day TAT request	Fax Results (yes or no)	Due Date of Report
W-99-MW6	6/21/05	0940	5	X					X						X							X				X		92	09	1			X	
W-100-MW7	"	0956	"	"					"						"							X				X		92	09	2			X	
W-99-MW8	"	1022	"	"					"						"							X				X		92	09	3			X	
W-98-MW9	"	1045	"	"					"						"							X				X		92	09	4			X	
W-99-MW10	"	1110	"	"					"						"							X				X		92	09	5			X	
TRIP BLANKS	"	—	4	"					"						"							X				X		92	09	6			X	

Comments/Special Instructions: *OXYGENATES WHEN REQUESTED ABOVE TO INCLUDE; BTEX, MTBE, DIPE, ETBE, TAME, TBA.

CONSULTANT ID # ERIL
GLOBAL ID # T0603702703

"PLEASE E-MAIL ALL EDF FILES TO RSHEARER@ERI-US.COM"

Relinquished by:	Date	Time	Received by:	Date	Time
			A Boyadzhyan	6/23/05	12:45
Relinquished by: A Boyadzhyan	6/23/05	15:00	Received by (Lab personnel) J Gonzalez	6/24/05	805

Laboratory Comments:
Temperature Upon Receipt: 3°C
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
QC Deliverables (please circle one)
Level 2
Level 3
Level 4
5 DAY TURN-AROUND FOR EXXONMOBIL REQUIRED
Site Specific-If yes, please pre-schedule w/ TestAmerica Project Manager or attach specific instructions

PURGING AND SAMPLING RECORD - FIELD LOG

CLIENT NAME: EXXONMOBIL 18F2Q | ERI JOB # 3316 13 | 0.163 FOR A 2" WELL
SITE LOCATION: 12616 IMPERIAL HIGHWAY | ANALYSIS: TPHg/8260B | 0.652 FOR A 4" WELL
FIELD CREW: ER/JG ER | DATE: 6/21/05 | 1.167 FOR A 6" WELL

WELL #	TIME	DEPTH TO WATER	DEPTH TO WELL	CASE DIA	CASE VOL(gal)	PRG VOL	COND.	TEMP	pH
MW6	8:45 AM	99.71	114.51	4	9.66	30			
	9:05 AM					1	1.98	75.1	6.93
	9:11 AM					10	1.88	75.0	7.08
	9:16 AM					20	1.88	74.5	6.98
	9:20 AM					30	1.86	73.9	7.01
SW	9:40 AM	100.23							
COMMENTS	Water Cloudy								

WELL #	TIME	DEPTH TO WATER	DEPTH TO WELL	CASE DIA	CASE VOL	PRG VOL	COND.	TEMP	pH
MW7	8:48 AM	100.11	114.12	4	9.15	27			
	9:25 AM					1	1.75	74.7	7.01
	9:30 AM					9	1.92	75.0	7.00
	9:36 AM					18	1.89	74.9	7.01
	9:42 AM					27	1.90	75.1	7.02
SW	9:56 AM	101.19							
COMMENTS	Water Cloudy								

WELL #	TIME	DEPTH TO WATER	DEPTH TO WELL	CASE DIA	CASE VOL	PRG VOL	COND.	TEMP	pH
MW8	8:51 AM	99.61	114.32	4	9.602	30			
	9:47 AM					1	1.84	77.2	7.02
	9:52 AM					10	1.86	77.3	7.01
	9:57 AM					20	1.85	77.0	7.03
	10:02 AM					30	1.87	76.9	7.00
SW	10:22 AM	100.46							
COMMENTS	Water Cloudy								

WELL #	TIME	DEPTH TO WATER	DEPTH TO WELL	CASE DIA	CASE VOL	PRG VOL	COND.	TEMP	pH
MW9	8:54 AM	98.87	113.45	4	9.52	30			
	10:08 AM					1	1.89	80.0	7.10
	10:13 AM					10	1.87	79.7	7.06
	10:19 AM					20	1.85	79.6	7.04
	10:25 AM					30	1.86	79.4	7.01
SW	10:45 AM	99.69							
COMMENTS	Water Cloudy								

PURGING AND SAMPLING RECORD - FIELD LOG

CLIENT NAME: EXXONMOBIL 18F2Q | ERI JOB # 3316 13 | 0.163 FOR A 2" WELL
SITE LOCATION: 12616 IMPERIAL HIGHWAY | ANALYSIS: TPHg/8260B | 0.652 FOR A 4" WELL
FIELD CREW:ER/JG EQ | DATE: 6/21/05 | 1.167 FOR A 6" WELL

WELL #	TIME	DEPTH TO WATER	DEPTH TO WELL	CASE DIA	CASE VOL	PRG VOL	COND.	TEMP	pH
MW10	8:57 AM	99.16	112.81	4	8.91	27			
	10:32 AM					1	1.86	80.1	7.05
	10:37 AM					9	1.87	79.8	7.04
	10:43 AM					18	1.89	79.6	7.02
	10:49 AM					27	1.86	79.3	7.00
SW	11:10 AM	100.31							

COMMENTS: Water Cloudy

WELL #	TIME	DEPTH TO WATER	DEPTH TO WELL	CASE DIA	CASE VOL	PRG VOL	COND.	TEMP	pH
				4	0.00				
SW									

COMMENTS:

WELL #	TIME	DEPTH TO WATER	DEPTH TO WELL	CASE DIA	CASE VOL	PRG VOL	COND.	TEMP	pH
				4	0.00				
SW									

COMMENTS:

WELL #	TIME	DEPTH TO WATER	DEPTH TO WELL	CASE DIA	CASE VOL	PRG VOL	COND.	TEMP	pH
				4	0				
SW									

COMMENTS:

WELL SAMPLING AND SURVEYING

1) Open well heads. This may require a socket or a special Allen wrench.

2) If the wells are not surveyed by a licensed land surveyor, then survey the wells if this hasn't been done before as follows:

   a) Select a permanent benchmark (e.g. curb at corner of site, property line). Record on "SURVEYGW" form.
   b) Measure and record rectangular coordinates from benchmark to each well.
   c) Set up tripod and transit where it can see all wells and the benchmark = Station "A". If you can't see all wells, two transit locations must be used. At least one well surveyed from Station "A" must be resurveyed from Station "B". Preferably, two or more wells are resurveyed.
   d) Carefully level the tripod using the bubble indicator.
   e) Place stadia rod on benchmark and record height from crosshair to reference, (D_o).
   f) Place stadia rod on each well (at the notch) and record ht. from well to crosshair, (D_w).
   g) Calculate casing elevation as shown on data sheet SURVEYGW.

   To check the accuracy in leveling the transit, set the transit in second spot and repeat steps 2c through 2g. Recalculation of casing elevations should agree within 0.01 ft. or a third placement of the tripod will be required.

3) Set up a decon station. This consists of four (4) buckets. Fill the first with deionized water and one (1) teaspoon (approximately one cap full) of Liquinox soap. Fill the next three (3) buckets with deionized water. To decon a probe or water level indicator, place the element and the tape in the buckets in series, finishing with a good rise. To decon a pump, place the pump, hose and wire leads into the buckets in series, and circulate water through the pump in each bucket. Move the equipment from the dirtiest to cleanest bucket, rinsing thoroughly in each bucket.

4) Decon the interface probe or water level indicator before inserting into each well. Review the historical groundwater concentrations and sample from cleanest well to hottest well, deconing between each well. Lower probe/indicator until it beeps - raise and lower and mark the level on the tape with your thumb. Estimate level to the nearest 0.01 ft. Note the depth to free product if present as indicated by the interface probe and the depth to water on your field notes and log. Note any odor when the probe is withdrawn from the well. Look for the notch or ink mark on the top of the well and measure all levels from that. Notch should be on the highest side of the well pipe. If no side is high, notch should be on the north side. Measure from the casing adjacent to the notch - not from the bottom of the notch. If there is no notch - make one. For sites that have free product, or historically have had free product, use a bailer to remove a sample of the top of the water column and measure the product in the bailer or look for a sheen. Take a picture of any bailers with product after labeling the bailer with the well number.

5) If there is free product, do not purge or sample. The presence of liquid phase hydrocarbons means the concentration in the water will be high anyway and the pump will be difficult to get clean enough to avoid contaminating other wells.

6) <u>Developing</u>: If the well has not been developed (it is new), surge the well by moving bailer up and down vigorously in the well for about 5 minutes. This will wash silt from the sand pack into the well where it can be removed.

7) Pull out as much silt as possible by running the bailer all the way to the bottom and withdrawing. Continue bailing until water is fairly clear or until local regulatory specifications are met. Removal of silt with the bailer will extend the pump life. Contact the Project Manager if water does not clear up by 10 casing volumes.

8) Decon pump by washing in TSP/water the rinsing with tap water and rinsing again with deionized water. Then pump clean water through the pump to push out any dirty water.

9) Purging: Place pump in well about 2 to 5 feet off bottom. Withdraw at least 3 casing volumes from the well, or until temperature, pH and conductivity stabilize (see local regulations). Be careful not to let the pump run dry. If an electric purging pump is used, such as a Grundfos pump, check the water level in the well with the water level indicator and slow pump down when water level is within 2 ft of the pump head. While purging, collect a water sample as often as possible and check for pH, conductivity, and temperature. Stable pH and conductivity would indicate the well has been filled with representative groundwater and purging is complete. If well recharges slowly, remove 1.5 casing volumes. Estimate flow rates by recording the time it takes to fill a 5-gallon bucket (1/2 of a 55-gallon barrel, etc.)

10) Decon pump thoroughly between each well by repeating step 7.

11) Label bottles with a "Sharpie Pen" when they are dry. Label as W-xx-MWy, where xx is water depth below surface in feet and y is well number (refer to SOP-1).

12) After the well has been developed, sample the water using a disposable bailer and surgical gloves to prevent oil from your hands from contaminating the sample. Be sure to leave no headspace or bubbles in any water sample to be tested for volatiles. Wells should be sampled within (24) hours of purging and the well should have recovered to within 80% of its volume before purging. (Slow recharge wells need to be addressed with the Project Manager - and may have to be purged slowly). Gasoline contaminated water requires at least three (3) 40 ml VOA's from each well. Preserve samples by acidifying to pH <2 (usually with two drops of HCl). Water suspected of contamination with oil or diesel requires 2 1-liter samples in amber bottles. Samples contaminated with oil will require 10 drops of H_2SO_4 for preservation. Samples for organic lead require two (2) 1-liter amber bottles.

13) Place like vials in a baggie and label the baggie. Put vials and baggie in an ice chest filled with ice and document samples and analyses required on a chain of custody. Take samples to the laboratory the same day samples are collected if possible, at least within 24 hours.

14) Clean wellhead gaskets (seals), put locking caps on the wells and replace the covers. Cover and label the drums (if any) of purge and decon water.

Analysis	Bottles	Preservative
8015 mod gasoline/8020(602)	min. of 3 x 40 ml VOA	2 drops HCl to pH <2
8015 mod diesel/8020(602)	2 1-liter & 3 x 40 ml VOA	2 drops HCl to pH <2 (applied to VOA's)
418.1 (TRPH)	2 1-liter amber	10 drops H_2SO_4 to pH <2
Organic Lead	2 1-liter amber	no preservative suggested
HOC - 8010 (601)	min. of 3 x 40 ml VOA	no preservative suggested

Items Needed:
Water Level Indicator
Disposable Bailers
Generator
Grundfos Pump and Reel
Grundfos Pump Control Box
Hydac Cond/Temp/pH Meter
Liter Bottles
VOAs
Distilled Water
4 Buckets
Bottle Brush
TSP Detergent
Stainless Steel Cable or Poly Rope
Cooler with Ice
Socket set and Allen Wrench (CNI Key)
Plastic sheeting

Items Needed for Surveying:
Topcon AT-F7 Transit
Tripod
Stadia Rod

SOP-6
Quarterly Well Monitoring
Rev 6/05

QUARTERLY WELL MONITORING

1) Give the site manager advance notification of field activities. Arrange for a sufficient number of drums. Obtain a site plan with the location and ID's of the wells to be monitored and a copy of the table from the last quarterly report with the previous groundwater data.

2) Open well heads. This may require a socket or a special allen wrench.

3) Set up decon station per SOP-5. Measure groundwater depths with water level indicator as per SOP-5 before any other action is taken. If the depth to the bottom of the monitoring well is unknown, reel out the water level indicator until you feel the probe contact the bottom. You may have to raise and lower the probe several times to "feel" contact with the bottom. The probe is not very heavy, and the bottom of the well may have a cushioning layer of silt. Record the depth of the well once you feel confident the probe is at the bottom. Note odors from well.

4) Calculate the linear footage of water in each well, by subtracting the depth to water from the total well depth. To obtain the casing volume in gallons, multiply the linear footage by a constant for the given well casing diameter. Typically, three casing volumes are purged from each well prior to sampling. **Always** Round up - if 3.4 gallons, then purge 4 gallons - if 12.1 gallons, then purge 13 gallons.

Casing diameter	Gallons per linear foot
2"	0.17
4"	0.66
6"	1.50
8"	2.60

5) After measuring all water levels, begin purging the wells in order of the cleanest to the most contaminated based on last quarter's data. Well purging procedures are outlined in SOP-5. While wells containing free floating product may not be sampled, the project manager may want the free product removed manually by bailer. Check with the project manager before bailing LPH. You may find that for shallow wells, it may be quicker to bail manually rather than set up the pump. Place purge and decon water in a 55-gallon drum or treat on site. Do not mix purge water from different wells in one drum. Record all purge data on Groundwater Sampling Field Logs. Record "LPH" and the thickness in feet and inches (to nearest 1/16 of an inch) in the comments section if a measurable level of LPH present. If non-measurable amount present then record "Sheen" in the comments section.

6) When the well has recovered at least 80% of its' original water level, collect samples using a clean, new disposable bailer. Use a new disposable bailer for each well. Make sure the rope or line is tied securely on the bailer, you don't want to go fishing. Sample in order of the cleanest to the most contaminated. If required, collect field (equipment) blanks.

7) Trip blanks are a QA/QC procedure that must be collected at every site. Obtain a trip blank from the laboratory. They will make them up for you. The trip blank to taken unopened to the site and is kept with the other samples in the cooler unopened during the day's sampling. Label the bottle as an arbitrary monitoring well. For example: if there are 5 monitoring wells to be sampled at the site, the trip blank should be labeled as if it were a sample from MW6. The trip blank is never opened and it is used to determine if any contaminants are introduced by the laboratory or during transportation of the samples.

8) Field (equipment) blanks are a QA/QC procedure to be collected at the project manager's discretion (or always for LACDPW sites). To collect a field blank decon a bailer thoroughly; pour distilled water into the bailer; pour the distilled water from the bailer into appropriate sample bottle(s) for the analysis

to be performed, allow for no headspace; label the bottle as an arbitrary monitoring well. For example: if there are 5 monitoring wells to be sampled at the site plus a trip blank, and a field blank is to collected, the field blank should be labeled as if it were a sample from MW7 (the trip blank is MW6). If a disposable bailer is used for sampling, use a new disposable bailer to collect the field blank.

9) Label sample containers when they are dry (refer to SOP-1). Place vials from each well in a separate plastic zip lock bag. Put bag in an ice chest and document samples and analyses required on a chain of custody (see attached examples).

10) Replace the locking caps, and the covers. Cover and label the drums of waste water. Place the drums on site in a location selected by the site manager. Usually, this will be near a dumpster or in the back, away from public view. Labels should face outward.

11) Decon all equipment per SOP-5 before leaving the site.

In general, groundwater sampling will be performed in accordance with LUFT guidelines. Several local agencies require that groundwater sampling occur under slightly different guidelines. Check with the project manager to find out which sites require special groundwater sampling procedures. Typically, the following apply:

Orange County Health Care Agency Requirements

No special requirements. Water sampling will be performed as per the State Water Resources Board's LUFT manual.

LARWQCB Groundwater Requirements

- Purge a minimum of three well volumes if recovery is fast, or one borehole volume if recovery is slow (water does not recover to 80% of original level within two hours).
- The last three readings must be within 10% for conductivity, temperature, and pH to show stabilization. This means that all three consecutive readings must be within these limits - the first with the middle, and the first with the last, and the middle with the last. For instance, pH readings of 6.92, 6.95, and 7.00 would be sufficient.
- Even though there are no guidelines for turbidity, the measurements should be less than 10 NTU, or meet the baseline level established during development, upon completion of purging. Check with project manager if you use the baseline turbidity level.
- Prior to sampling document recovery time by measuring the water level in each well to prove that at least 80% recovery has occurred.
- A trip blank must be collected.
- In the comments column of the chain of custody, write "Prepare laboratory report in WIP format."

San Diego Department of Health Services Groundwater Sampling Requirements

- SDDHS does not encourage purging wells until dry.
- Purge one borehole volume of water if recovery is fast, collecting pH/temperature/conductivity measurements while purging, then remove an additional one-half borehole volume of water. If the first and second measurements vary by less than 10%, purging is considered adequate. If not, keep purging water in one-half borehole volume increments until the measurements vary by less than 10%,

or three borehole volumes have been removed. Obtain three consecutive pH/temperature/conductivity measurements that are within 10% of each other.

- o If recovery is slow (water does not recover to 80% of original level within two hours) purge only one borehole volume of water.
- o Prior to sampling document recovery time by measuring the water level in each well to prove that at least 80% recovery has occurred.

Ventura County Environmental Health Division
Groundwater Sampling Requirements

- o A trip blank and a duplicate sample must be analyzed for each site.
- o Custody seals must be place over the cap of each sample.

Under certain conditions the calculated purge volumes will need to be calculated in borehole volumes instead of well casings volumes. Use the following to calculate borehole volume in gallons.

Well I.D.	Bore Volume
2"	0.90 gal/ft. in water
4"/or nested wells	1.70 gal/ft. in water

The completed groundwater sampling log must contain:
- pH/temp./conductivity and turbidity measurements indicating stabilization
- time and volume of water removed at each pH/temp./conductivity measurements
- total volume of water purged
- name of personnel performing sampling
- date and project number
- problems or unusual conditions arising during purging or sampling, such as the well going dry during purging, water in the well vault, missing well caps or locks, odors, appearance of purge water, etc.
- 80% recovery measurement and time of measurement after purging and before sampling

All chains of custody for the client's groundwater sites must contain the consultant work release number, station identification number and client contact among the other items to be filled out. Check the groundwater sampling field log and chain of custody for completeness, accuracy and neatness. If you have any questions, call!!!

Make sure that the date and time of relinquished and accepted at the lab are the same on the chain of custody. Also, make sure the lab fills in the sample condition information and signs for the samples on the chain of custody

Santa Barbara County Environmental Health Services
Groundwater Monitoring Guidelines

I. Groundwater Monitoring

A. Groundwater levels are to be monitored/measured in **all wells** in a short time span.
B. Measure the groundwater levels (correct for "free product" thickness).
C. Use a clear bailer to check for the presence of "floating product," sheen, and odors.
D. Replace well cover until ready to purge well.

II. Purging

A. Amount: generally 3 to 5 (no more than 10) well volumes; via bailer, pumps, or vacuum truck.

B. Parameters (pH, temperature, conductivity) shall stabilize while purging.
   1. Measure the parameters of a small volume (i.e., a 500 ml) of the water as it is removed from the well. Measure the parameters initially and at regular volume intervals (e.g., after every well casing volume). More frequent testing may be needed if the well is known to go dry.
   2. Wells must be allowed to recharge prior to sampling (see section G of the Santa Barbara County LUFT Manual).

C. Slow recharging wells are wells that are purged dry before removing 3 well volumes of water, and take more than **two (2)** hours to recharge.
   1. Note this on the field records and estimate the number of well volumes removed.
   2. Allow the well to recharge a minimum of two (2) feet and then sample.
   3. **Sample wells no later than 24 hours after purging.**
   4. Note the water level and percentage of recharge in the report.

III. Sample Collection

A. Use either a decontaminated Teflon, stainless steel, or disposable bailer.

B. Sample containers are to be supplied and certified by a laboratory:
   1. VOAs of 40 ml volume (at least 3 per well – check with lab and the PM for specific requirements); fill VOAs first to reduce volatization.
   2. 4 oz sample containers for Pb (metallic lead) analysis (if needed).

C. Fill containers by pouring along the inside of the vial to reduce volatilization.

D. Form a positive meniscus with the water, to avoid trapping air, before placing the cap on the VOA. **Samples with headspace are not acceptable for analysis.**
   1. Check for bubbles by inverting and tapping gently to dislodge bubbles.
   2. If bubbles are found, uncap and repeat steps C and D.

E. Label all samples and store immediately in an ice chest at 4 degrees Celsius filled with ice.

F. Be careful to properly decontaminate equipment between each and every well.